

Dairy Pipeline

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Department of Dairy Science

Blacksburg, VA

www.vtdairy.dasc.vt.edu

Phone: (540)231-4432 / Fax: (540)231-5014

Preparing your feeding program for lower milk prices

Feeding involves many decisions that impact both income and expenses, especially when milk prices are low. The first reaction might be to reduce supplement feeding as this is the largest purchased expense for most farms. However, its impact on income might be greater than the savings realized. **The dairy business can learn a great deal from the feedlot business. Notably, the tight profit margins in feedlots have demanded that feed managers become shrewd business persons.** Following are some feedlot tips that could well apply to the dairy feeding program.

1. Closely examine all additives in the ration, particularly those high in daily cost, whose benefits are not supported by documented research.
2. Feedlots focus on the five “R”s for good feed management. They are:
 - Right feed
 - Right pen
 - Right amount
 - Right time
 - Right way

Right Feed—Ration formulation is only as good as the information provided to the nutritionist. Allocate the best forages to the transition and high producing herds. Measure dry matter % on at least a weekly basis for all fermented and wet by-product feeds. (This can be accomplished by using a Koster tester or a microwave oven.) Make ration adjustments to maintain the desired dry matter intake.

Right pen—Providing the best feeding environment is essential. Feed bunks should be protected from the effects of sun, rain and excessive heat. Soakers are recommended during the heat of the summer. Clean up refusals every day and remove spoiled feed. Cleaning of water tanks on a daily (or every other day) basis is encouraged.

Right amount—Most dairies feed for 5 – 10% refusal which encourages DMI for the milking herd but results in a significant amount of refusal that must be discarded. (Remember, refusals fed to the heifer can spread diseases such as Johne’s.) Many feedlots feed to a clean bunk with cattle consuming the last amount within an hour of the next feeding. This is challenging and requires a feed manager/bunk manager adept at predicting intake patterns of the herd.

Right time—Cattle thrive on consistency. Feeding groups within minutes of the same time each day is critical. This also applies to other areas of the operation such as milking and lot scraping.

Right way—A key to promoting intake and digestive health is reducing variability. Rations should be mixed in the same order each time and delivered in a uniform manner down the bunk. Dairies should evaluate particle size through spot checks on a weekly basis to make sure that mixing time is not too long or short. Accurate delivery of the TMR requires experience to prevent wasteful pile-ups of TMR at the end of the bunk.

The “R”s listed above may seem like common sense but are critical to achieving consistency in a feeding program. Excessive variability in rations leads to DA’s, ketosis and other metabolic disorders which rob cows of high peak milk and lactation yield.

--Robert E. James

Extension Dairy Scientist, Dairy Nutrition

(540) 231-4770; email: jamesre@vt.edu

Adapted from: Dr. O Abe Turgeon. A Feedlot Consultant’s Perspective on Feeding and Milling. 2006 High Plains Dairy Conference. March 2006

Dry Cows Need Heat Stress Relief Too

This is the time of year to get serious about heat abatement strategies for your herd. Though we enjoy the warmer weather, most lactating cows perform best at temperatures from 40 – 65°F. Signs of heat stress start to occur at around 75°F. This spring, once you’ve installed your new fans and sprinkler systems and cleaned off your existing fans in the lactating herd, you also need to consider making sure that your close up dry cows are kept cool.

Research has shown that cows experiencing even mild heat stress in late gestation, suffer various problems at calving and in the subsequent lactation. Various research trials have shown that there are significant effects of heat stress that directly affect a cow’s next lactation and the health of the calf. These include: shorter gestation length, decreased calf birth weights, increased incidence of retained placentas and the subsequent health problems associated with RP’s, decreased dry matter intake (and we all now how critical that is to the next lactation), decreased colostrum quality, decreased calf vigor, decreased absorption of immunoglobulin by the calf, decreased milk production and a reduction in fertility postpartum. All this and they haven’t even started milking yet!

Remedies for heat stress are similar to those for

cooling lactating cows, though significantly cheaper due to fewer cows requiring investment. For those that don't have a facility, shade is extremely important. You can purchase a shade cloth to make an artificial shade shelter very inexpensively. This option is better than using existing trees for numerous reasons including mastitis prevention and extending the life of your trees! Availability of clean water is also very important. Cows need access to 3 - 4 linear inches of trough space per cow. If you have facilities, fans and sprinkler systems are very effective at keeping body temperatures down. A sprinkler system at the feed bunk will help to maintain dry matter intake at this critical time period.

So, should you be thinking about cooling your dry cows this summer? Yes. Research has shown time and time again that by doing so, you can improve milk production, overall health of the cow and calf and improve reproduction. Remember, that maximizing comfort, reducing stress and providing a properly balanced ration for your dry cows will ensure that she is set up for the lactation to come. For more information on cow cooling, see Dairy Pipeline article "It's summer time! Are your cows cool?" – July 2004.

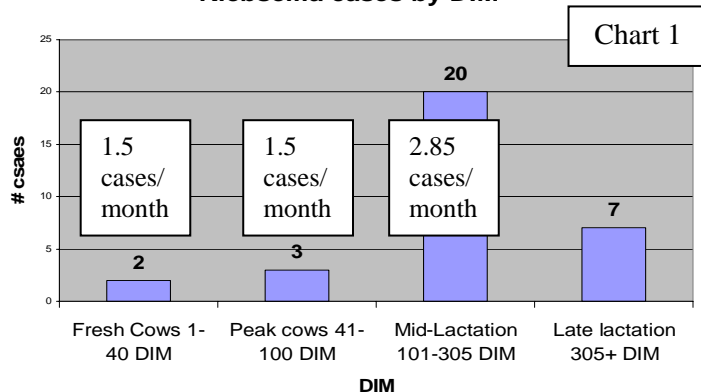
--Sue Puffenbarger

Dairy Science Extension Agent, Franklin County
(540) 483-5161 email: smp@vt.edu

Is Your Herd Ready for Summertime?

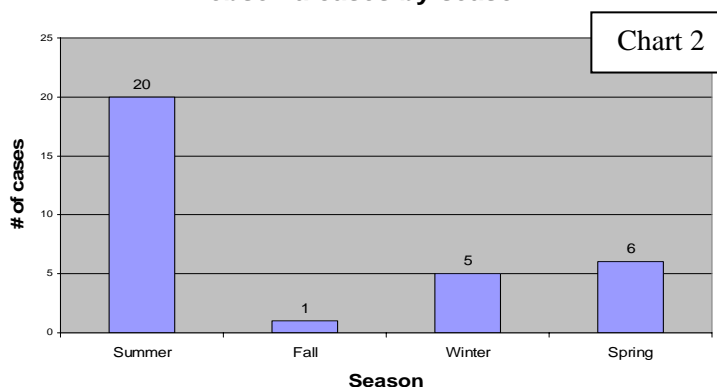
Since the majority of cases of mastitis occur around the time of freshening, vaccination protocols for protecting cows against the severe sickness that often accompanies cases of coliform mastitis are designed to provide maximum protection during the first 100 days post-calving. Maximum protection from UpJohn J-5 Bacterin or J-Vac® vaccines may only last for a limited time. Cows that are far into a lactation period may not be as well protected as those animals that are less than 100 days in milk (DIM).

Klebsiella cases by DIM



In the majority of milking herds, many of the cows are past 200 DIM. During recent *Klebsiella* outbreak

Klebsiella cases by season



investigations through the Virginia-Maryland Regional College of Veterinary Medicine, **we have observed cases of *Klebsiella* mastitis distributed evenly throughout lactation** (see chart 1). This fact has led to the concern that **a large portion of many herds are not protected as well as we would like going into the summer months.**

Due to a multitude of factors, coliform mastitis (caused by *Klebsiella* and *E. coli*) is a bigger problem on most farms in the summertime (See chart 2). If coliform mastitis is a problem for you, discuss with your veterinarian about the need to give all lactating cows greater than 30-60 DIM a booster of your Upjohn J-5 Bacterin, J-Vac® or Endovac-bovi® vaccine during the month of June.

--John F. Currin

Extension Dairy Veterinarian
(540) 231-5838; email: jcurrin@vt.edu

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Upcoming Activities

Dairy Quiz Bowl

Northern District – Saturday, May 20 – Orange County
Northwest District – Saturday, June 3 – Augusta County
State- Tuesday, June 27 – Virginia Tech
For more information, contact Dave Winston at
(540) 231-5693; dwinston@vt.edu

Southeast Dairy Youth Retreat

North Carolina will be hosting the Southeast Dairy Youth Retreat this year July 10-14 in Jonesville. Please check <http://www.dasc.vt.edu/youth/index.html> for additional details as they become available.

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

Bennet G. Cassell

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Dairy Extension Coordinator and Extension Dairy Scientist,
Genetics & Management

www.ext.vt.edu

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